

Handwriting classification based on support vector machine with cross validation

Abstract:

Support vector machine (SVM) has been successfully applied for classification in this paper. This paper discussed the basic principle of the SVM at first, and then SVM classifier with polynomial kernel and the Gaussian radial basis function kernel are chosen to determine pupils who have difficulties in writing. The 10-fold cross-validation method for training and validating is introduced. The aim of this paper is to compare the performance of support vector machine with RBF and polynomial kernel used for classifying pupils with or without handwriting difficulties. Experimental results showed that the performance of SVM with RBF kernel is better than the one with polynomial kernel.